

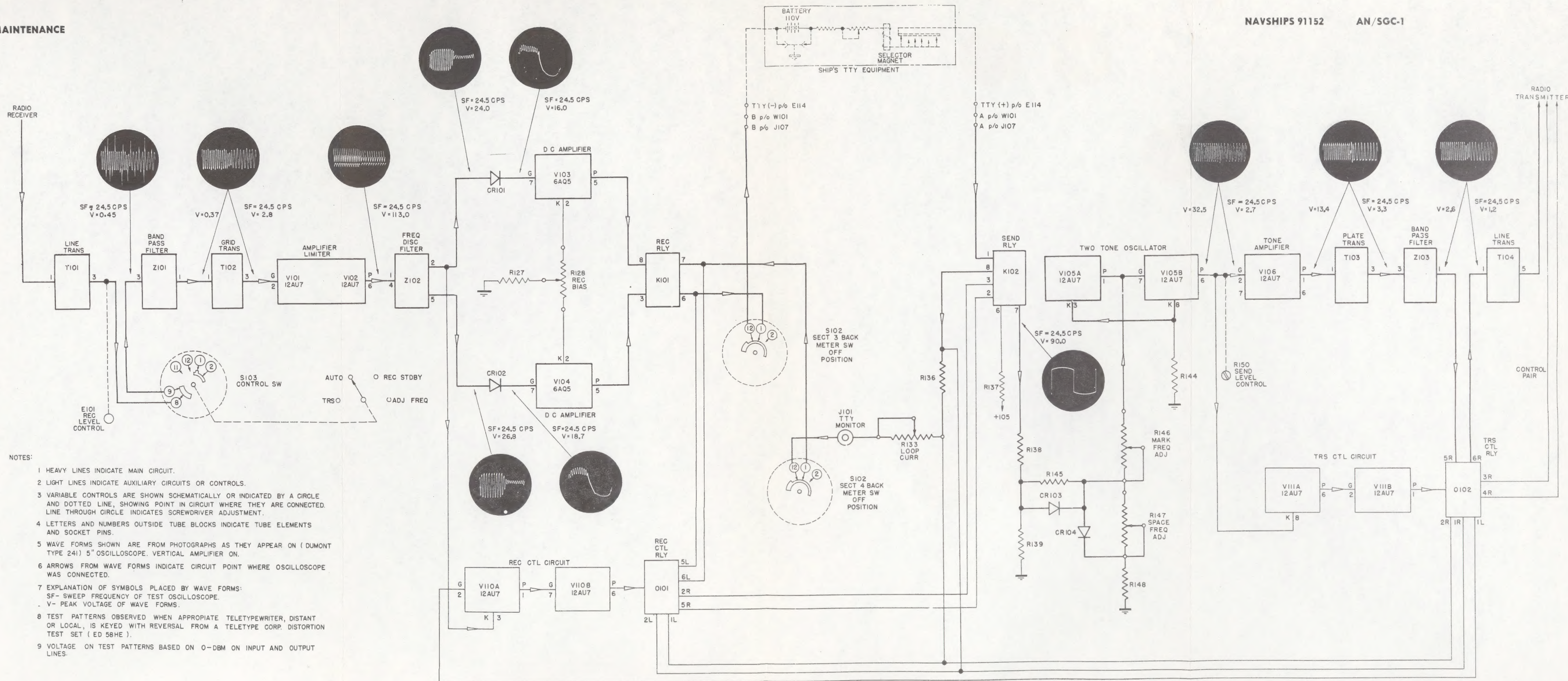
PRELIMINARY
TRAINEE'S GUIDE
for
ELECTRONICS TECHNICIANS

Shipboard Equipment
Indoctrination Course

TELECOMMUNICATIONS
EQUIPMENT

VOLUME 3
SCHEMATICS

December 1967



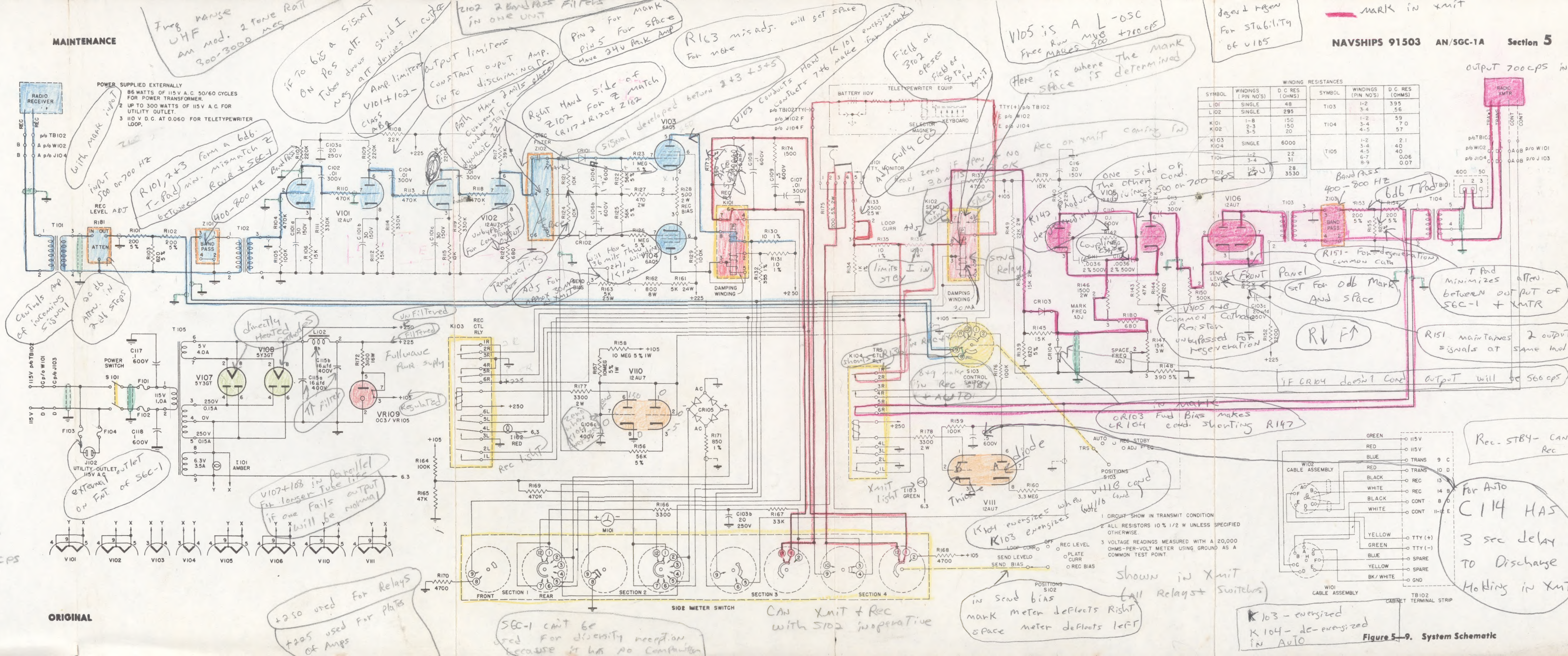


Figure 5-9. System Schematic

MAINTENANCE

NAVSHIPS 91503 AN/SGC-1A

Section 5

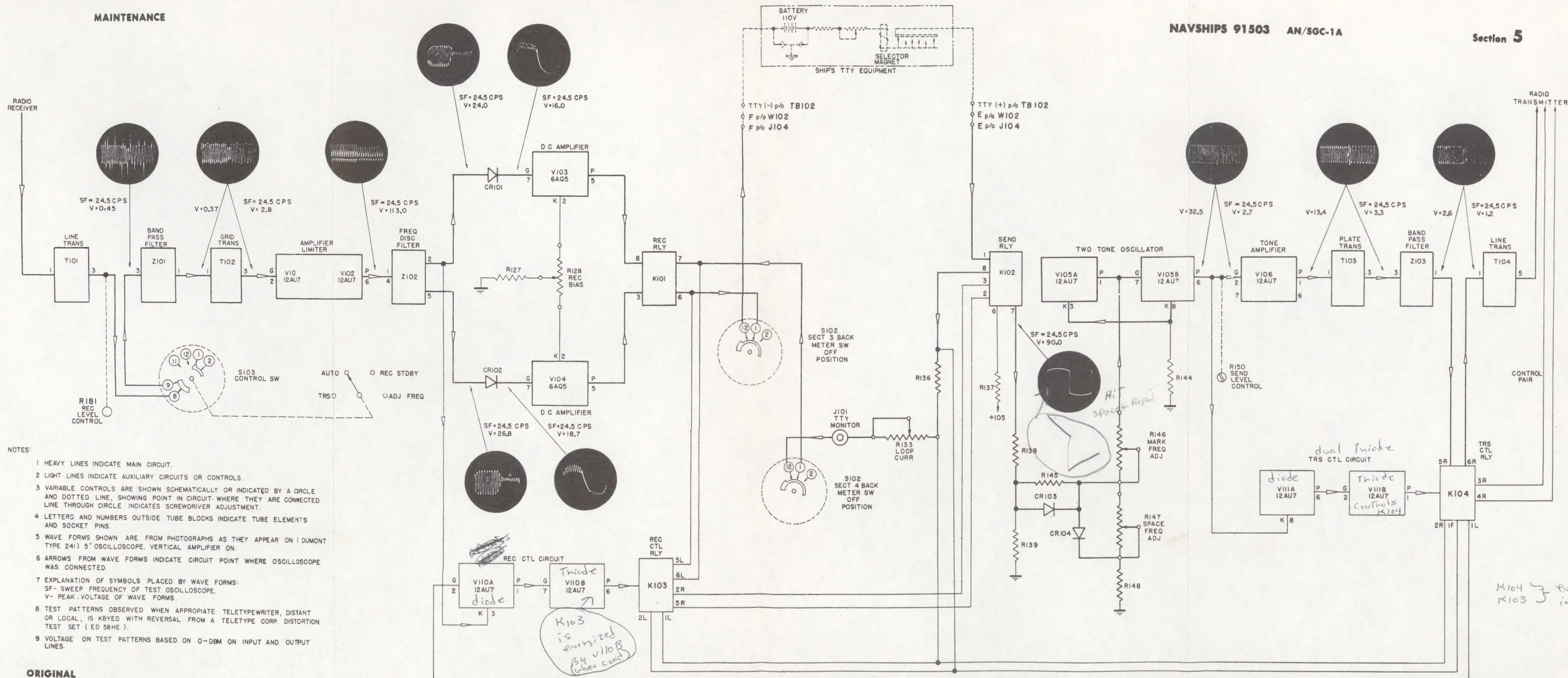


Figure 5-8. Servicing Block Diagram

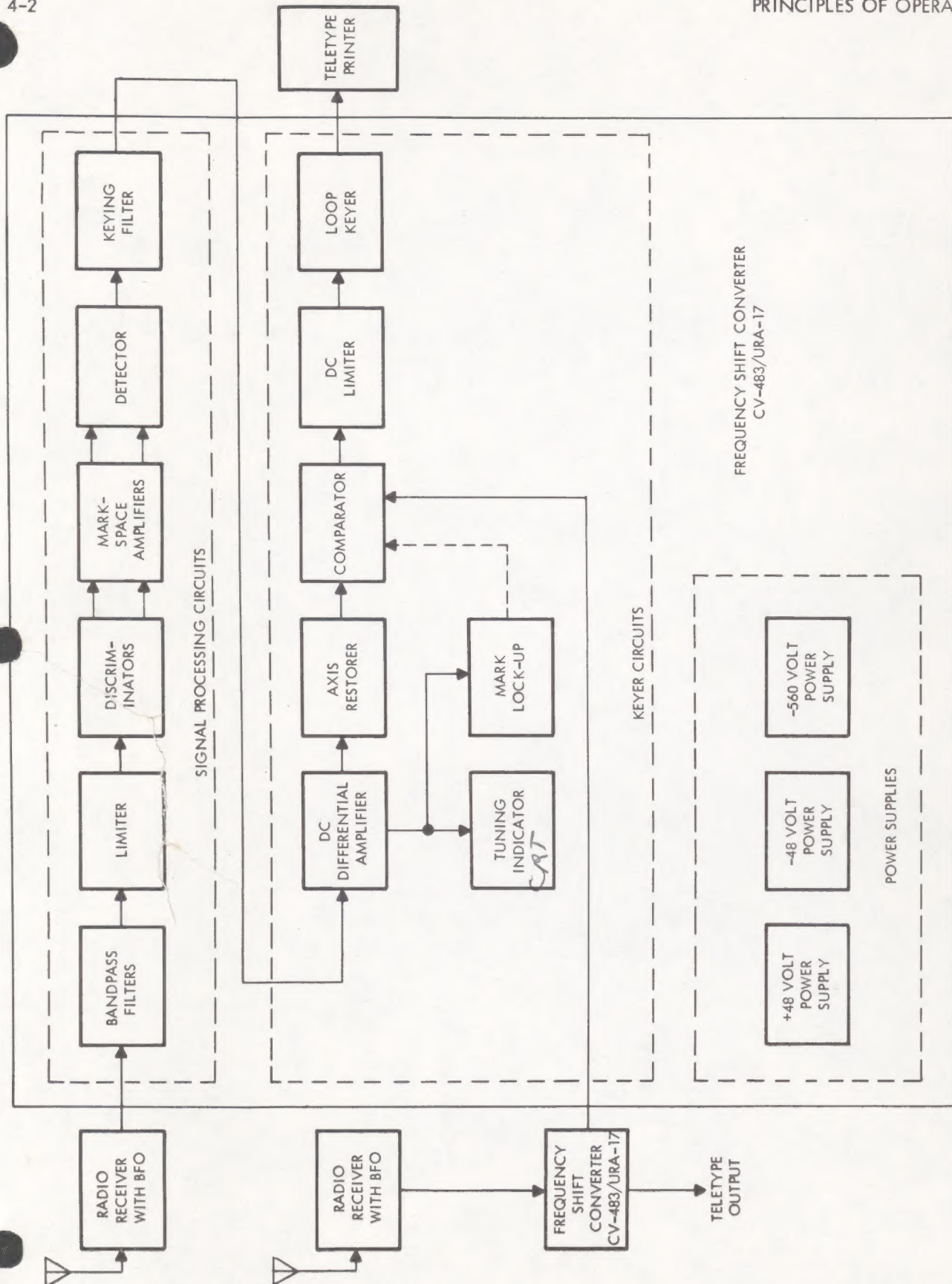


Figure 4-2. Comparator-Converter Group AN/URA-17, Functional Block Diagram

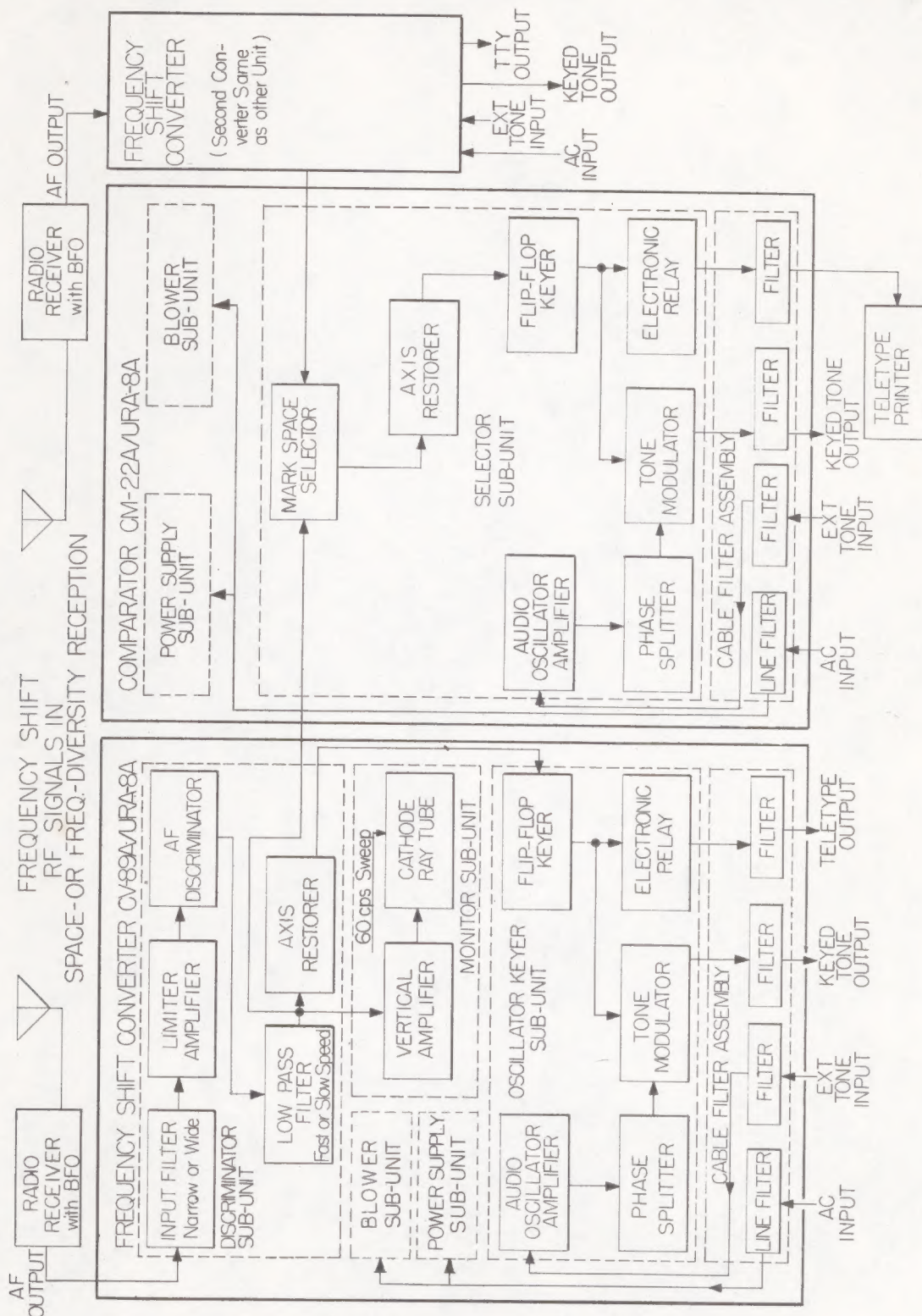


Figure 2-2. Functional Block Diagram, Frequency Shift Converter-Comparator Group AN/URA-8B

NAVSHIPS 91490

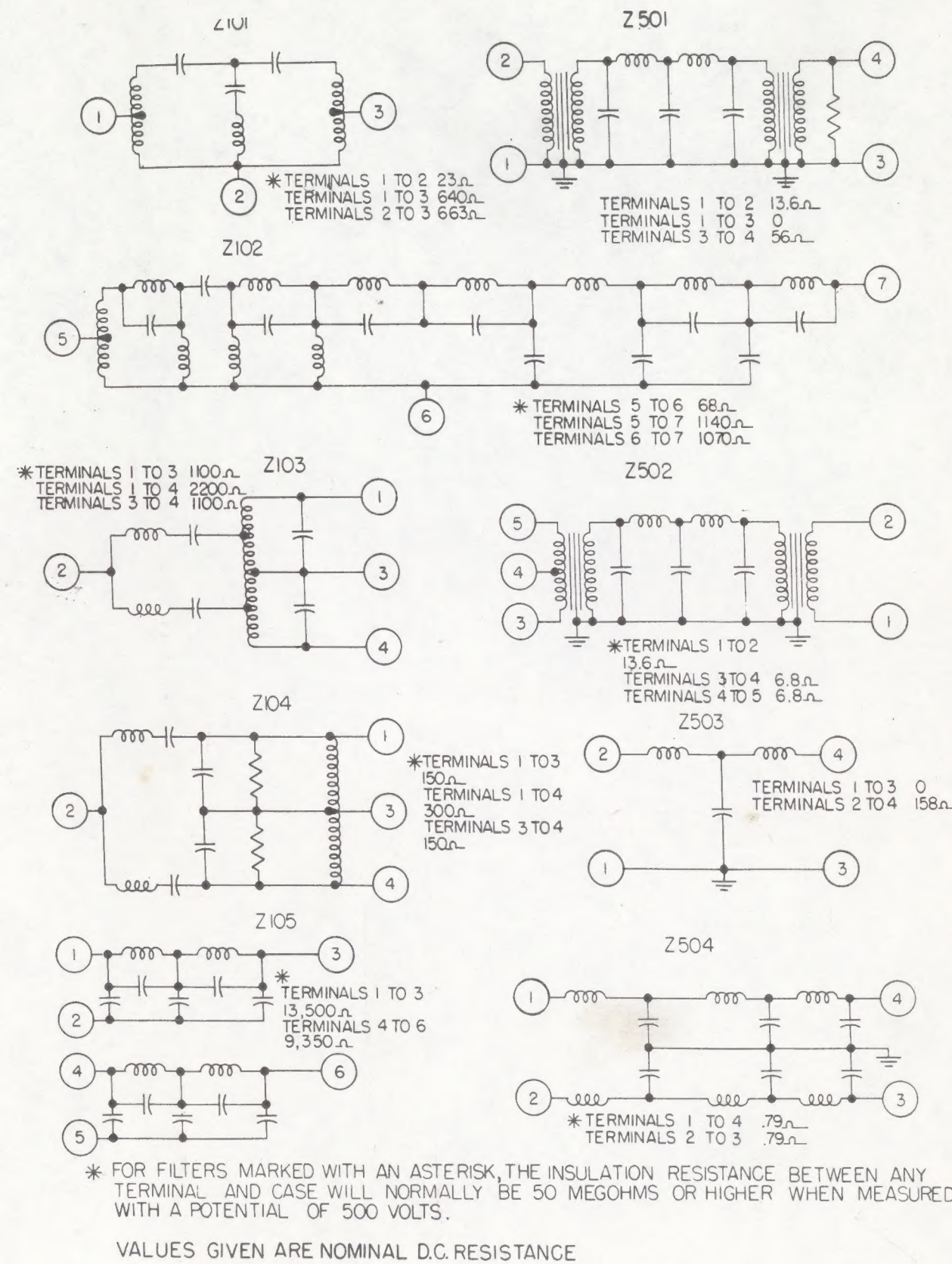
RESISTANCE AND VOLTAGE DATA

SYMBOL	PIN OR TERM. NO.	VOLTAGE TO GROUND OR TO POINT NOTED	RESISTANCE TO GROUND OR TO POINT NOTED
J101	1	3.15 VAC	.015
	2	0	80K to 100K
	3	0	∞
	4	0	∞
	5	0	∞
	6	236V	60K
	7	3.15 VAC	.015
	8	0	200K to 120K
	9	0	∞ spare
	10	0	∞
	11	0	∞
	12	0-12V	4.5 meg
	13	0	∞ spare
	14	0	∞ spare
J201	1	3.15 VAC	.015
	2	0-12V	4.5 meg
	3	0	56
	4	-35V	700
	5	0	0
	6	236V	60K
	7	3.15 VAC	.015
	8	0	spare
	9	0	spare
	10	0	spare
	11	0-13.5 VAC	10
	12	0	0
	13	0	spare
	14	30-70V	∞
J301	1	3.15 VAC	.015
	2	0	spare
	3	0	spare
	4	0	80K to 100K
	5	0	0
	6	236V	60K
	7	3.15 VAC	.015
	8	6.3 VAC to term 9	0.3 to term 9
	9	0	spare
	10	1.25 VAC to term 13	0.25 to term 13
	11	0	spare
	12	0	spare
	13	625 VAC	1360
	14	0	spare
J401	1	3.15 VAC	.015
	2	6.3 VAC to term 3	0.43 to term 3
	3	-35V	700
	4	0	0
	5	0	0
	6	236V	60K
	7	3.15 VAC	.015
	8	113V to term 9	3.8 to term 9
	9	0	spare
	10	1.25 VAC to term 13	0.25 to term 13
	11	0	spare
	12	0	spare
	13	625 VAC	1360
	14	0	spare

Conditions:
 All voltages are dc unless marked ac; DC voltmeter 20,000 ohm/volt; AC voltmeter 1000 ohm/volt; voltage measured with external circuits connected and complete equipment energized, but no input signal; Resistances measured with all external circuits disconnected; resistance in ohms, K=1000 and Meg=1,000,000; See figure 5-3 for additional voltage and resistance data.

Notes:
 1. Depends upon the setting of the CYCLES SHIFT control.
 2. Depends upon the position of the SHIFT switch.
 3. Depends upon the setting of the LEVEL control and the position of the PRG. CPS switch.
 4. Depends upon the setting of the THRESHOLD control.
 5. Depends upon the position of the POWER switch.
 6. KEYS switch in the TUNE position.
 7. Voltage supplied by teletype printer equipment.

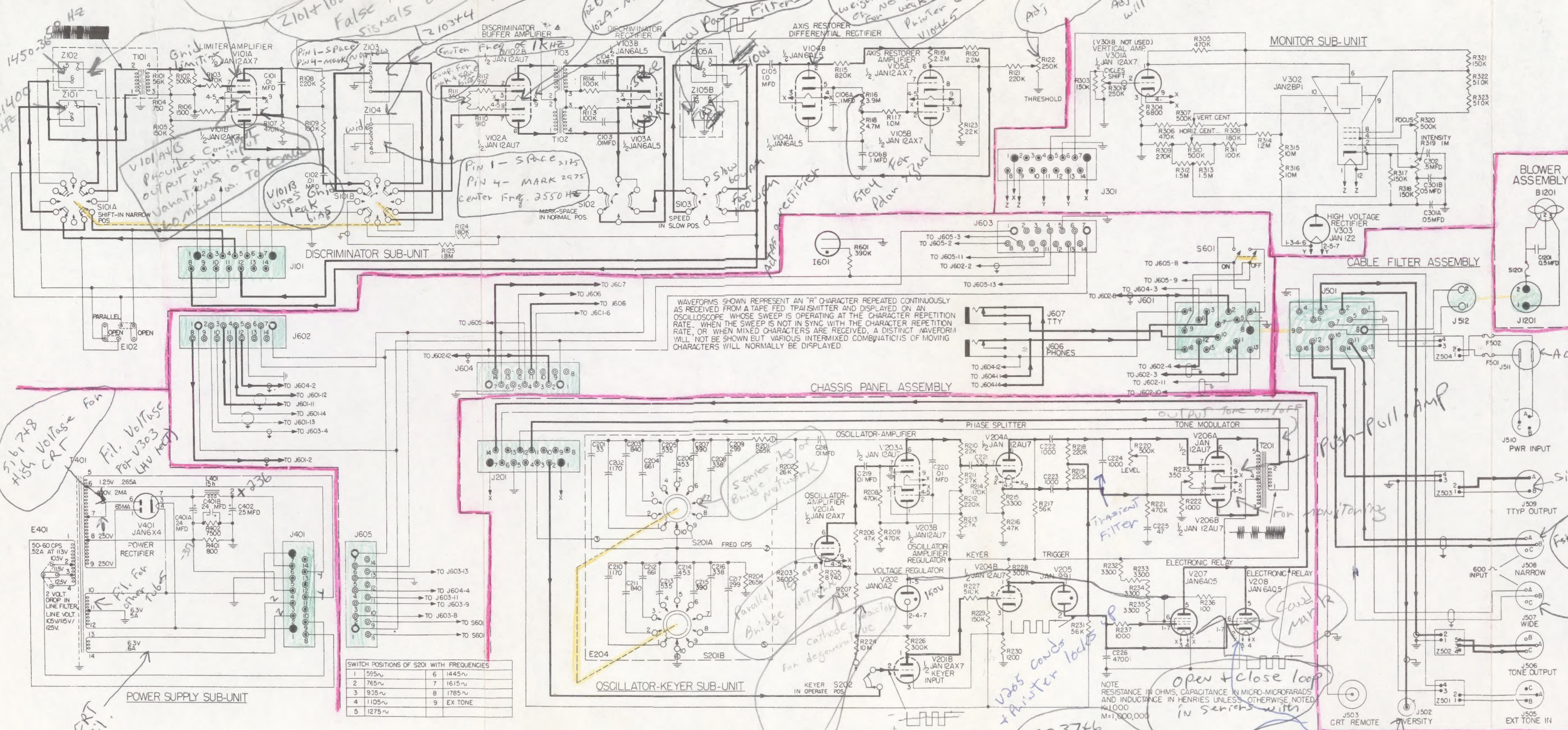
Figure 5-17. Frequency Shift Converter CV-89A/URA-8A, Schematic Diagram

AN-URA/8B
MAINTENANCE

NAVSHIPS 91490

NAVSHIPS 91490

NAVSHIPS 91490



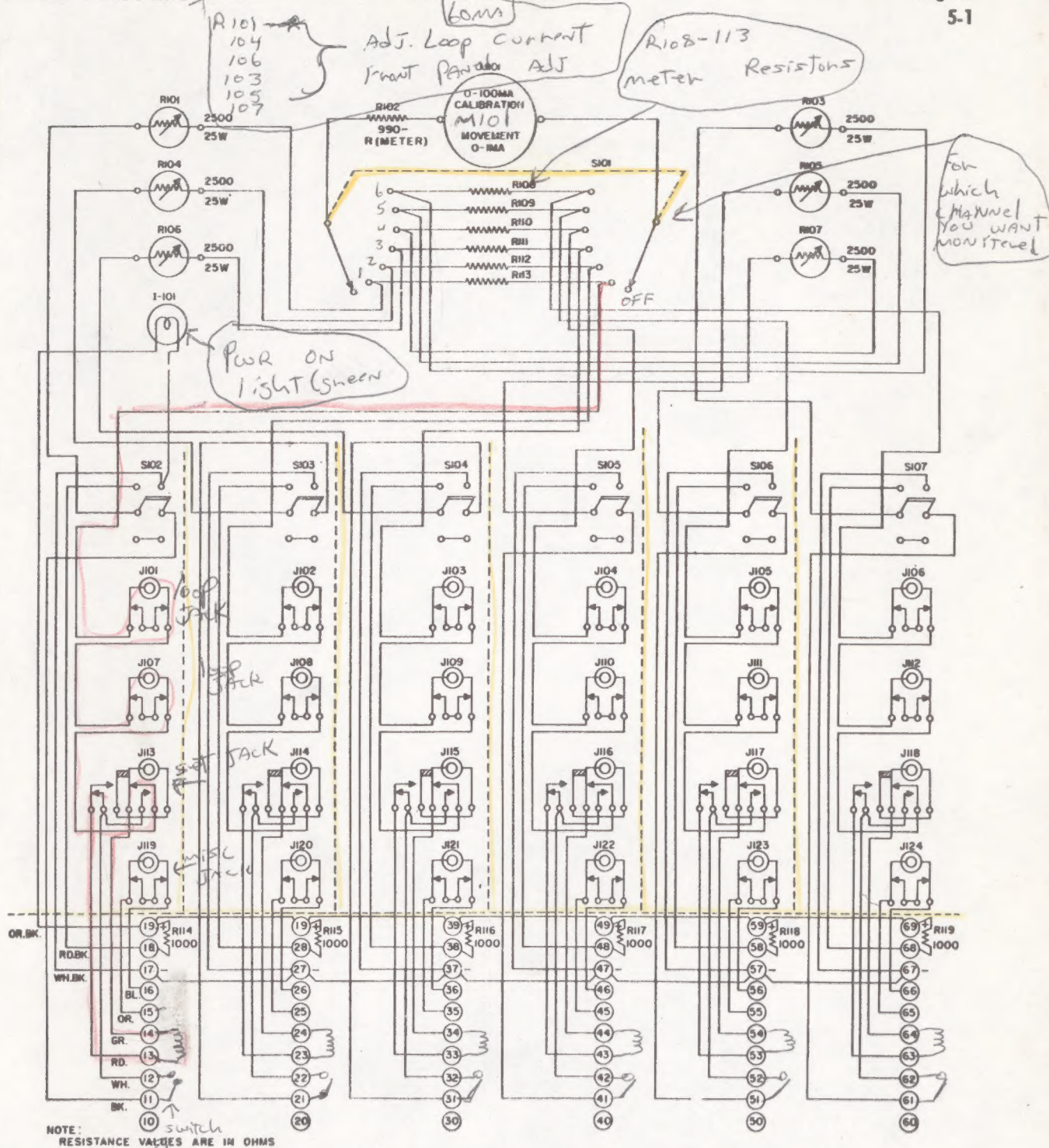


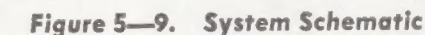
Figure 5-1. Teletype Panel TT-23()/SG, Schematic Diagram

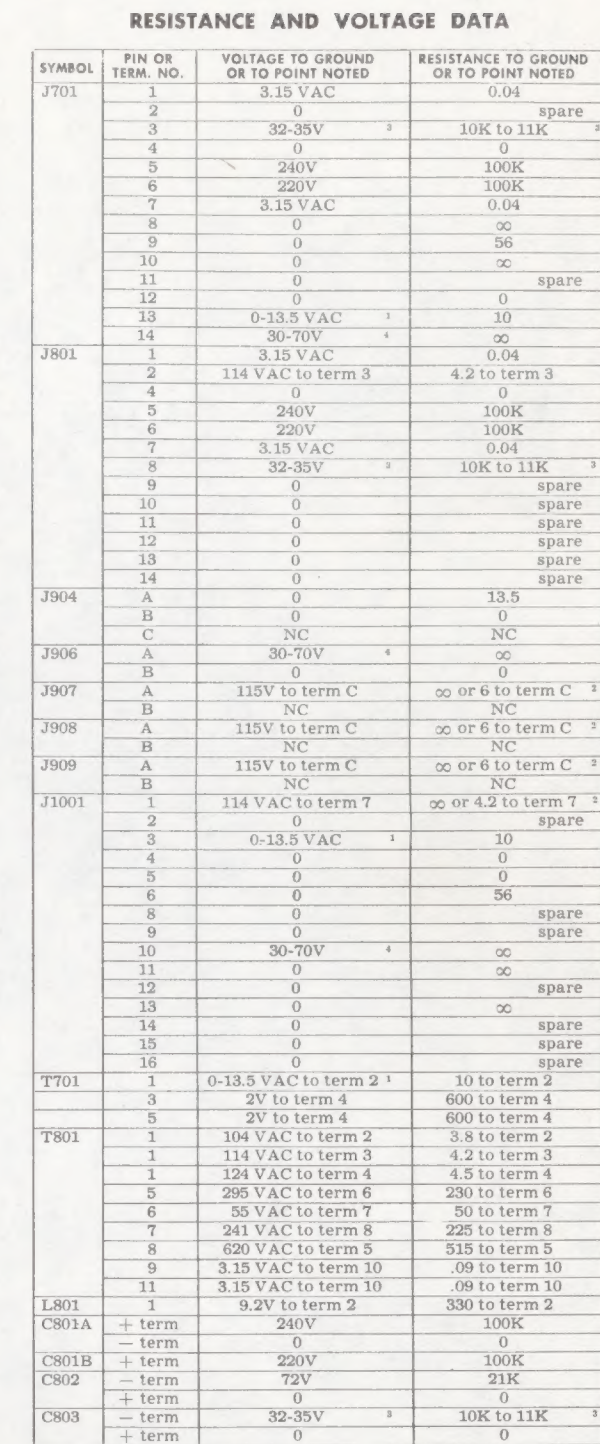
where Terminal equip
is in loop
mark - closed
space - open

Feeds info. To 6 diff Printers

R114-R119 - Current limiting

inductors - Field change To Handwire TTY





Conditions:
 All voltages are dc unless marked ac; DC voltmeter 20,000 ohm/volt; AC voltmeter 1000 ohm/volt; Voltages measured with external circuits connected and complete equipment energized, but no input signal. Resistance measured with all external circuits disconnected; Resistance in ohms, K = 1000 ohms; Ω = 100,000; See figure 5-4 for additional voltage and resistance data.

Notes:
 1 Depends upon the setting of the LEVEL control and the position of the FREQ. CPS. switch.
 2 Depends upon the position of the POWER switch.
 3 Depends upon the setting of the FREQ. CPS. switch.
 4 Voltage supplied by teletype printer equip.

Figure 5-18. Comparator CM-22A/URA-8A, Schematic Diagram